

Work Permit # SS06-001S

Work Order # Job# Activity#

1. Work requester fills out this section. **区**Standing Work Permit Requester: Located in C-A WCC's Log Dept/Div/Group: C-A Department Date: 7-15-06 Other Contact person (if different from requester) Ext. Work Control Coordinator: Located in Work Control Log Est. End Date: 7-31-07 Start Date: 8-01-06 Brief Description of Work: ROUTINE ENTRY FOR INSPECTION, DATA COLLECTION. TOURS, OR SKILL OF THE CRAFT TASKS IN POSTED RADIATION AREAS AT THE COLLIDER ACCELERATOR DEPARTMENT. Refer to C-A OPM 9.5.4 for a list of permanent radiological areas. Due to the nature of radiological areas at the accelerator there will be some posted transient radiation areas that may not be listed on the OPM but may be covered by RWP 06-01 with approval of the RCD Representative. Building: C-A Complex Room: Equipment: Service Provider: 2. WCC, Requester/Designee, Service Provider, and ES&H (as necessary) fill out this section or attach analysis **ES&H ANALYSIS ⊠**Radiation **Radiation Concerns** ■ None ★ Activation ☐ Airborne Contamination Other ☐ Special nuclear materials involved, notify Isotope Special Materials Group Fissionable materials involved, notify Laboratory Criticality Officer Radiation Generating □ Radiography ■ Moisture Density Gauges ☐ Soil Density Gauges X-ray Equipment Devices: Safety Concerns **⋈** None Ergonomics ■ Transport of Haz/Rad Material ☐ Confined Space* Explosives ☐ Lead* ☐ Penetrating Fire Walls ☐ Adding/Removing Walls or Roofs ☐ Corrosive ☐ Flammable ■ Magnetic Field* Pressurized Systems ☐ Fumes/Mist/Dust* ■ Material Handling □ Rigging/Critical Lift ☐ Asbestos* □ Cryogenic □ Beryllium* □ Electrical ☐ Heat/Cold Stress ■ Noise* ■ Toxic Materials* ■ Non-ionizing Radiation* □ Biohazard* ■ Elevated Work* ☐ Hydraulic □ Vacuum ☐ Chemicals* ☐ Excavation ☐ Lasers* ☐ Oxygen Deficiency Other * Does this work require medical clearance or surveillance from the Occupational Medicine Clinic?
Yes No **Environmental Concerns** ■ None ☐ Work impacts Environmental Permit No. Land Use Institutional ☐ Atmospheric Discharges (rad/non-rad) ☐ Soil Activation/contamination ■ Waste-Mixed Controls ■ Waste-Radioactive ☐ Chemical or Rad Material Storage or Use □ Liquid Discharges □ Waste-Clean ☐ Cesspools (UIC) □ Oil/PCB Management ■ Waste-Hazardous ■ Waste-Regulated Medical ☐ High water/power consumption ■ Spill potential ■ Waste-Industrial ■ Underground Duct/Piping Waste disposition by: ☐ Other Pollution Prevention (P2)/Waste Minimization Opportunity: No □ Yes FACILITY CONCERNS **X** None ■ Electrical Noise ☐ Vibrations ☐ Potential to Cause a False Alarm ☐ Access/Egress Limitations ■ Impacts Facility Use Agreement ☐ Temperature Change □ Other ☐ Configuration Control ■ Maintenance Work on Ventilation Systems ■ Utility Interruptions WORK CONTROLS Work Practices Exhaust Ventilation ☐ Lockout/Tagout ☐ Spill Containment ☐ Security (see Instruction Sheet) ■ None Other ■ Back-up Person/Watch ☐ Posting/Warning Signs ☐ Time Limitation ☐ HP Coverage ☐ Scaffolding-requires ☐ IH Survey ☐ Barricades ■ Warning Alarm (i.e. "high level") inspection Personal Protective Equipment ■ None ☐ Ear Plugs ☐ Gloves ☐ Lab Coat ☐ Safety Glasses ☐ Ear Muffs □ Coveralls ☐ Goggles ☐ Respirator ☐ Safety Harness ■ Disposable Clothing ☐ Face Shield ☐ Hard Hat ☐ Shoe Covers ☐ Safety Shoes □ Other Permits Required (Permits must be valid when job is scheduled.) None Cutting/Welding ☐ Impair Fire Protection Systems ☐ Concrete/Masonry Penetration □ Digging/Core Drilling ■ Rad Work Permit-RWP No RWP-06-01 ☐ Confined Space Entry ☐ Electrical Working Hot Other Dosimetry/Monitoring ☐ Heat Stress Monitor ☐ Real Time Monitor ■ None X TLD ☐ Self-reading Pencil ☐ Air Effluent ■ Noise Survey/Dosimeter ■ Waste Characterization Dosimeter Self-reading Digital ☐ Ground Water ☐ O₂/Combustible Gas ☐ Other Dosimeter ☐ Passive Vapor Monitor □ Liquid Effluent ☐ Sorbent Tube/Filter Pump Training Requirements (List specific training requirements) Radiation Worker I, C-A Facility Specific Safety Training, or C-A Radiobiology Training for NSRL, or C-A Access Training for U-Line. If using the permit when all hazard ratings are low, only the following need to Based on analysis above, the Walkdown Team determines the risk, complexity, and coordination ratings below: sign: (Although allowed, there is no need to use back of form) ES&H Risk Level: X Low ☐ High Date: Service Provider: Complexity Level: I Low ■ Moderate ☐ High Date: Work Coordination: X Low ■ Moderate ☐ High Authorization to start Date: (Departmental Sup/WCC/Designee)

3. Both work requester and service provider contribute to work plan (use attachments for detailed plans) Work Plan: (procedures, timing, equipment, and personnel availability need to be addresses) Estimated dose shall be considered by the WCC prior to each job. Dose estimates will not exceed 20mRem per person per job or 20mRem per entry. This permit is not intended for handling or exposure to tritiated water, unapproved alteration of radiation barriers, or for the potential dispersal of radioactive materials. A trained Radiation Worker may escort visitors, permission is required from the C-A ESHQ Division Head (x5272) READ ALL POSTINGS, MANY LOCATIONS REQUIRE ACTIVATION CHECKS PRIOR TO REMOVING ITEMS Special Working Conditions: Required: Consult with RCD staff prior to starting any job in the U-Line Neutrino Block House. Operational Limits Imposed: No entry in to areas greater than 100mR/Hr. Review posted survey of area as applicable. Post Work Testing Required: Follow exit requirements on area postings (Activation Check may be Required) Job Safety Analysis Required: ☐ Yes 🗵 No. Walkdown Required: ☐ Yes 🗵 No Reviewed by: Primary Reviewer will determine the size of the review team and the other signatures required based on hazards and job complexity. Primary Reviewer signature means that the hazards and risks that could impact ES&H have been identified and will be controlled according to BNL requirements Life # Date <u>Title</u> Name (print) **Signature** Primary Reviewer Peter Cirnigliaro Signature on file 21868 7/21/06 FS Representative Paul Berg Signature on file 19773 7/21/06 Other Other Work Control Coordinator Located in Work Control Log Service Provider Review Done: X in series ☐ team 4. Job site personnel fill out this section. Note: Signature indicates personnel performing work have read and understand the hazards and permit requirements (including any attachments). Job Supervisor: Contractor Supervisor: Life#: Life#: Workers: Located in Work Control Log Workers: Workers are encouraged to provide feedback on ES&H concerns or on ideas for improved job work flow. Use feedback form or space below. 5. Departmental Job Supervisor, Work Control Coordinator/Designee Conditions are appropriate to start work: (Permit has been reviewed, work controls are in place and site is ready for job.) Life#: Name: Refer to C-A OPM-ATT 2.28.a , Meetings Diagrams and Tables 6. Departmental Job Supervisor, Work Requester/Designee determines if Post Job Review is required. ☐ Yes ☒No Post Job Review (Fill in names of reviewers) Name: Life#: Signature: Date: Life#: Date: Name: Signature: 7. Worker provides feedback. Worker Feedback (use attached sheets as necessary)

8. Closeout: Work Control Coordinator (authorizing dept.) checks quality of completed permit and ensures the work site is left in an acceptable condition. (WCC can delegate clean up of work area to work supervisor)

a) WCM/WCC: Is any feedback required? ☐ Yes ☒ No

b) Workers: Are there better methods or safer ways to perform this job in the future?

Yes

No

(woo can delegate clean up of work area to work supervisor)			
Name:	Signature:	Life#:	Date:
Comments:			